

# APPENDIX H

## 2026 USAC Midwest Thunder Speed2 Midget Technical Specifications

*In the interest of the USAC Speed2 Midwest Thunder Midget Series, major chassis or engine features considered to be new, innovative, unusual, not considered standard or not used by the majority of the current midgets, are to be considered not approved or permitted. All cars shall appear and fit the guidelines of a "traditional" midget. The series must specifically approve any such new items. All cars and engines must meet the official USAC Speed2 Midwest Thunder Midget Series specifications and are subject to technical inspection prior to and/or following any event. Any car owner or driver in charge, refusing to allow his car to be checked or leaves the track after being told of intent to check, shall be considered guilty of violation of specifications and will receive a loss of points and monies from that race event. Cars failing post-race technical inspection may receive a loss of finishing position, points and monies from that race event, may be subject to suspension as determined by the USAC Speed2 Midwest Thunder Midget Series technical director, and must demonstrate proof that infraction has been corrected before participating in subsequent races. Repeat infractions may result in additional penalties. USAC Speed2 Midwest Thunder Midget Series reserves the right to change rules as required to maintain the competitiveness of the series following reasonable notice to competitors.*

### 400. Race Procedures

- A. All participants must be a USAC Speed2 licensed member to receive member benefits, which include USAC member accident insurance, annual point fund money, and contingency awards at each race (if any). Participants without USAC license will receive points for the first three races, but will not receive insurance or contingency awards. USAC Midwest Thunder Midget Series strongly encourages all participants to obtain the USAC Speed2 license, available via the USAC Web site at a cost of \$150.
- B. Drivers must be or over age fourteen (14) years of age to participate in MTM events, but must meet any age requirement specified by Race facility. Drivers under age sixteen (16) must provide documentation for Race Official review and approval. A driver's status for Rookie of the Year will be exhausted once that driver (who has not regularly participated in a comparable Midget sanctioning body) competes in a USAC Speed2 MTM main event for the fifth (5th) time. All other race procedures are dictated by the race facility (starting positions, flagman and scoring decisions, finishing positions).
- C. Race officials have the authority to order off the course any car, which in their opinion, represents a danger to other participants or themselves due to mechanical or safety issues, reckless operation, or failure to maintain a competitive speed. Race official's decision is not subject to protest by participants.
- D. Substitute drivers may take the place of participants before the start of any race and will start in the last position in the first race in which they compete. Substitute will be allowed to start in an 'earned' position for all remaining races.
- E. To simplify the race day process, the series will conduct multiple pre-season inspection days, in both Ohio and Indiana, allowing us to inspect cars and seal engines in a more sanitary environment than the typical post-feature pit. Show-up points will be provided to all attendees as incentive to participate.
- F. Beginning in 2026, USAC Midwest Thunder Midget Series will provide points for qualifications, heats, B-Main and A-Mains. Points will mirror those utilized by the USAC National Midget series as spelled out in Section 5.9B in USAC Rulebook: 679920e047b1af77cd1e0102\_Part 4 – Points.pdf. Points will be maintained on MyRacePass and on the USACRacing.com web site with USACRacing.com serving as the official tally.

The following rules apply to all midgets with production-based automotive engines. Refer to appendix for rules pertaining to Lightning Sprints with production-based motorcycle engines.

### 501. Design & Construction

All phases of design and construction are subject to the approval of the USAC Speed2 Midwest Thunder Midget Series Technical Director. The Technical Director may exclude any car, design, or construction that they deem unsafe or does not meet the specifications, the spirit, and/or the intentions of the rules contained herein.

## 502. Dimensions & Weight

- A. The wheelbase must be at least 65 inches and no more than 76 inches.
- B. Engine setback will be a minimum of 33 inches. This measurement will be taken from the front of the engine plate to the center of the rear axle.
- C. All cars must weigh a minimum of 1100 lbs., including water, oil, fuel, and the driver with his personal equipment). Weight may be adjusted by engine package to maintain competitiveness, as determined by Technical Director. Cars may be weighed prior to and/or following any event. Details for scaling procedure will be announced in driver meeting. If car found to be light will be scored last and awarded last place points and money for event car weighed.
- D. Additional bolt on weight must be mounted and fastened to the frame and/or chassis in a secure manner and must be painted white with car number. Weight must be mounted in an area between bottom frame rails, front and rear axles and no higher than mid rails at cockpit. All weight must be mounted within confines of frame. No weight may be added during yellow or red flag. NO BALLAST/ WEIGHT IN NERFS, BUMPERS, FRONT AXLE. Highly encourage use of AllStar Ballast Bracket (Product Code #14194 – various tubing sizes) or similar product.

## 503. Car Construction / Body

- A. All cars shall be rear drive only.
- B. Engines must be mounted within a maximum 1" offset (2" total) of the centerline of the chassis. The crankshaft must be parallel to the bottom plane of the chassis. Engine inclination must not exceed Forty-Five (45) degrees from vertical as measured from the vertical centerline of the cylinder bores.
- C. Only torque tube type drivelines, utilizing only one u-joint, will be allowed the torque tube must be one solid piece. Torque tube hoop or strap highly recommended . Highly recommend driveline containment system utilizing steel shield bolted to engine plate or containment blanket to cover torque ball and u-joint.
- D. Radius rods may not be attached within the confines of the cockpit.
- E. The driver shall be seated directly behind the engine: drivers head cannot be no more than one (1) inch off center line of roll cage, measured at center line of seat to top of driver's helmet when seated in an upright position.
- F. Only standard type Midget Car bodies, tail tanks and hoods will be permitted.
- G. The front part of the body, known as the nose assembly, shall not be wider than the parallel lines of the body and may not exceed the width of the frame. The nose assembly may not extend forward beyond the confines of the front bumper.
- H. Any item added to resemble imitate and/or specifically designed to deflect, trap and/or form a pattern for air to travel in a directed manner, except for those used to cool and/or protect engine and brake systems will not be permitted.
- I. The engine must be covered with a cowling or hood secured in place. The hood or cowling need not enclose the sides of the engine.
- J. A forward facing scoop, or ducting, supplying "forced air induction" to the injection inlets is not permitted.
- K. Side panels covering the sides of the engine and/or vertical spill plates may not extend vertically more than the height of the cockpit panels. All parts of the engine between the frame rails must have a hood covering, except for the air filter. Down tubes must be of the standard midget type. Excess panels will be permitted at the discretion of the technical director.
- L. Any wicker or turnout may not extend past the frame rail vertical of down tubes or cage, rearward of back of cage, or below bottom of frame rails.
- M. Right side cockpit body panels must be a maximum of thirty-six (36) inches high as measured from the bottom frame tube. The opening must be 150 square inches and not distract the driver's vision as determined by the technical director.

- N. Left side cockpit body panels may be a maximum of thirty-six (36) inches high as measured from the bottom frame tube. The opening must be 150 square inches and not distract the driver's vision as determined by the technical director.
- O. Side visors on roll cage (body panel) will be allowed, they will be limited to eight (8) inches tall. Visors that restrict driver's vision at the discretion of USAC Speed2 Midwest Thunder Midget Series officials will not be permitted.
- P. Sail panel may extend rearward to triangular bar at back of roll cage, sail panels may not extend forward past a cross plane established by seat back.
- Q. All paneling must not extend past edge of frame rails more than thickness of material.
- R. One (1") inch turnout allowed on all body and sail panel edges. (except sun visor and nerf bar panel)
- S. Side visors on roll cage will be allowed, must maintain 8" vertical and 23" horizontal opening on right side. The left side visor can be no larger than right.
- T. Only steel, aluminum or carbon fiber driver floor (belly) pan is permitted (the driver floor pan must support driver weight when stood on). The belly pan may not extend rearward past the leading edge of the rear axle and must be flat from side to side without any aerodynamic aids. Horizontal panels may not extend below the plane of the under pan or fuel tank.
- U. Sun visors must not extend forward more than seven (7) inches from the front of the forward most edge of the roll cage/ halo tube, and may not be wider than the width of the cage; sun visors must be flat on both sides. For fan recognition, all teams are encouraged to place driver's name on their visor in large letters.
- V. Airfoils, wings, spoilers or other aerodynamic appendages will not be permitted. The Technical Director may have any panel or part removed which in their opinion is not within the spirit or intent of this rule.
- W. With the exception of suspension components, induction and/or exhaust systems and nerf bars, no accessory or component of the car may extend more than 6 inches from the main frame tubes. Cylindrical oil tanks mounted outside the frame, behind the engine must be mounted as close to the frame as practical.
- X. Rear view mirrors are not permitted.
- Y. Aluminum pitman and steering arms are allowed. They must be one piece, no welding and a web thickness of 1/2 inch minimum.
- Z. An effective firewall of must be installed between the engine compartment and the cockpit. It must be as leak proof as practical.

#### **504. Roll Cage & Chassis**

- A. Frame and/or chassis must be constructed of 4130 normalized tubing.
- B. All cars must have a roll cage that is integral with the frame and does not encroach upon an imaginary cylinder, 20 inches in diameter, extending through the top cockpit opening directly above the seat. The roll cage should extend four inches above the driver's helmet when seated in the driving position.
- C. Main uprights forming the roll cage must be a minimum of 1-3/8 inches O.D. x .095 wall thickness 4130 normalized tubing. Bottom rails must be a minimum of 1/1/4 inches O.D. by .083 wall thickness or 1-3/8 inches O.D. X .065 wall thickness.
- D. No water or oil coolers are to be placed above or beside the cockpit opening.

#### **505. Fuel System**

- A. A conventional midget style tail tank meeting SFI specification 28.1 or a tail tank/bladder meeting SFI specification 28.2 is required. Metal tanks are not permitted. Rollover valves will be mandatory. All fuel tanks must be securely mounted between frame rails and behind the driver.
- B. All tanks must have a minimum of four mounts to the chassis.

- C. Fuel tanks may not be mounted to the chassis utilizing any portion of the access plates or the nut plates bonded into the fuel bladder.
- D. Methanol (M1) fuel only. No additives are allowed except for top lube. All fuel is subject to testing at any time. Any fuel that does not conform to the USAC standards, as administered at the track, will be considered illegal. The use of illegal fuel could result in disqualification from the event and/or the entire program.

#### **506. Bumpers / Nerf Bars**

- A. The car must be equipped with a rear bumper at all times.
- B. Front and rear bumpers, and nerf bars must be constructed of magnetic and/or stainless steel (NO TITANIUM) tubing with a minimum O.D. of 7/8 inch and having a minimum wall thickness of .065 inch and a maximum wall thickness of .120 inch. A maximum of three horizontal and/or three vertical tubes are allowed in the construction of nerf bars.
- C. All cars must have a tubular front bumper extending forward no more than 21 inches from the leading edge of the front axle. Bumpers must be constructed so as not to cause a safety hazard.
- D. All cars must be equipped with nerf bars on both sides and mounted directly to the chassis. The right nerf bar cannot extend beyond the outside of the right rear tire.
- E. With the exception of the exhaust system, no components or accessories may be attached to the nerf bar assembly.

#### **507. Steering & Suspension**

- A. Removable steering wheels incorporating a quick release mechanism conforming to SFI Specification 42.1 are mandatory. Pip pin type mechanisms are not allowed.
- B. Welded aluminum or titanium suspension parts are prohibited with the exception of Jacob's ladder (Watts link).
- C. Drag link straps are mandatory
- D. No electronic or mechanical weight, sway bar or any suspension item adjuster allowed. (No torsion bar/coil over spring adjusters, Jacob ladder/Panhard bar adjusters, or 'shadow jackers' permitted.)
- E. Cockpit adjustable shocks permitted.
- F. No independent suspension. Only torsion bars or coil-over suspensions are allowed.
- G. Cars are limited to four (4) shocks/dampeners.

#### **508. Axles**

- A. The car's axles connecting the wheels must be of one-piece tubular construction without the capability of camber or independent castor adjustment to the wheel assembly. Offset kingpin bushings are allowed.
- B. Any other construction will be considered as independent suspension.
- C. All front axles must be constructed of SAE 4130 steel or a steel alloy equivalent in structural strength. Titanium front or rear axles are not permitted.

#### **509. Wheels**

- A. The number of allowable wheels is restricted to two (2) front wheels and two (2) rear wheels on each car.

- B. The rim diameter must be 13 inches.
- C. The left rear and both fronts may be a maximum of eight (8) inches in rim width.
- D. The right rear wheel may be a maximum of ten (10) inches in rim width.
- E. Tire bead locking device must be used on the outer bead seat of the right rear tire and wheel assembly.
- F. The use of full-face brake scoops and/or wheel covers on the inside of wheels is not allowed.
- G. All bolts are mandatory in bead lock and wheel centers.
- H. Wheel cover fasteners made of steel are highly recommended.
- I. Electronically controlled tire pressure bleeders will not be allowed.

### 510. Tires

- A. Any device(s) used to warm the tires before competition is prohibited.
- B. Any solvents or chemicals applied to the tire that alters the chemical makeup of the compound or has the effect of altering the tire durometer is prohibited.
- C. Any tire that is found to deviate from the original factory specifications will be confiscated. The maximum penalty for chemically altering a tire is a one-year suspension from competition and loss of all points earned for the season.
- D. Siping and/or grooving permitted.

The tires listed below are the only tires approved for competition:

- 1) Hoosier Race Tire – (LF:D12, D15) (RF:D12, D15, D20) (LR:RD12, D12, D20, FOCUS) (RR:SP2, SP3)

(We are providing a burn-off period until the 7/10/2026 Bloomington race for the SP-2s to allow drivers to use the tires remaining in their possession.)

### 511. Throttle

- A. Throttle toe straps are mandatory. A minimum of three (3) return springs must be connected to the throttle, and at least one of these must be connected to the butterfly shaft. Throttle-by-wire pedals require two return springs attached to the pedal.
- B. If the throttle actuating mechanism is the cable type, the cable must be encased.
- C. The throttle pedal must have a wide-open pedal stop.

### 512. Brakes

- A. Cars must be equipped with an effective braking system.
- B. Master cylinders not fixed to the frame must have flexible lines.
- C. Brake discs are limited to steel, ferrous, or aluminum alloy manufacturing. Titanium, carbon, and/or carbon composite brake discs are not allowed.
- D. If at any time during competition, it becomes evident that a car is without brakes, the necessary repairs must be completed before the car can continue in competition.

## 515. Engine Packages

The intent of the USAC Speed2 Midwest Thunder Midget Series Engine rules is to utilize production engines with stock internal dimensions, with a target range of 200 to 225 horsepower. All engines must be normally aspirated, internal combustion, four cycle, reciprocating piston type, incorporating a maximum of four (4) cylinders in line. Engines must be production engines from a passenger car manufacturer and reasonably available in the United States. No purpose built race engines, race engine blocks, race engine cylinder heads or race engine crankshafts are allowed. USAC Speed2 Midwest Thunder Midget Series reserves the right to inspect and seal engines to simplify race day procedures. Optional engine sealing will be available and encouraged to simplify race day inspection process.

The following engines are permitted in the USAC Speed2 Midwest Thunder Midget Series:

### **GM Ecotec LE5 2.4L**

Maximum displacement 2.4Liters

### **Honda (K24 – A2, or Z7) 2.4 L including JDM (must have A2 head with casting number RBB)**

Maximum displacement 2.4 Liters

### **Ford Focus Zetec 2.0L**

Maximum displacement 2.0Liters

(Other production-based engines such as Toyota 2AZ-FE, Chrysler World, and Ford/Mazda Duratec 2.3L (23 I-4/L3) may be considered by USAC Speed2 Midwest Thunder Midget Series technical director upon request)

### **The following rules apply to all engine packages unless otherwise noted:**

- A.** Constant flow mechanical fuel injection or electronic fuel injection with plenum or individual runner intake is permitted. A runner may not be adjustable when the engine is running. Restrictor may be required, as determined by the Technical Director, to maintain the competitiveness of the series. Use of a restrictor to reduce base plate opening permitted.
- B.** All parts must have come from the same engine model—no swapping parts from different models.
- C.** All following internal engine components must be OEM and used in their originally intended configuration (for example intake cam/rocker cannot be used for exhaust), and must not be modified in any way unless otherwise noted below:
  - 1) Block – limited to removing material with the sole express intent of fitting in the vehicle. The addition of an engine block guard or 'Girdle' not permitted. Engine sleeves may be replaced with aftermarket sleeves machined to stock specifications.
  - 2) Cylinder heads – Includes all related parts in the head assembly. May modify the cooling system, for example adding a fitting to block external passages. Heads may be decked for trueing – excess decking resulting in compression ratios outside of those found in similar engines not permitted. Machining, grinding, sanding, or etching of the intake and/or exhaust ports is STRICTLY PROHIBITED. Altering of the shape and/or size of the intake or exhaust ports from OEM specs is prohibited. (see Ford Focus Exception below)
  - 3) Crankshaft – no modifications. Adding, removing, lightening, chamfering or “knife edging” crankshaft counterweights is strictly prohibited.
  - 4) Cams – no modifications to the cams with stock duration and lift, may change cam timing. (see Ford Focus Exception below)
  - 5) Rocker Arms/Lifters – cannot have any alterations, they must remain stock

- 6) Valves – must remain stock, no alternations (no adding angles)

**Ford Focus Zetec 2.0L Exception** – may utilize Aftermarket Cams and port head to compensate for reduced displacement in comparison with other approved motors.

**D. Should any of the listed engine components be deemed obsolete by the Original Equipment Manufacturer and are no longer available, MTM will consider requests received with proper documentation and approve a suitable replacement. The following components have been approved for use in 2026:**

- Honda Valves: OEM Exhaust Valve Part Number 14721-PRB-A00 may be replaced with Supertech Exhaust Valve HEVN 1020D. OEM Intake Valve Part Number 14711-RBB-A00 may be replaced with Supertech Part Number HIVN 1022D
- Honda Piston: OEM Piston may be replaced with Wiseco Part # 6631M87 or 568M87
- Ecotec Piston: Wiseco piston part number will be announced in the future.

**E. Parts that can be changed**

- 1) Valve springs (must not exceed 65# closed pressure and must be stock appearing)
- 2) Valve spring retainers and keepers
- 3) Connecting Rods – may be replaced with matching OEM specifications and may result in no changes to stock dimensions
- 4) Timing chain / Belt
- 5) Cam Gears, Sprockets
- 6) Balance shafts – can be removed
- 7) No titanium parts are allowed in engine.

**USAC Speed2 Midwest Thunder Midget Series will utilize the Katech Whistler machine to detect modifications to combustion chambers which fall outside of the range exhibited by similar engines to determine compliance with all rules listed above.**

**Oil System:** Wet Sump or Dry Sump permitted

**Ignition System:**

- A. Electronics that provide traction control are prohibited. All electronic components may be inspected, sealed, or confiscated by Technical Director at any time. The maximum penalty for utilizing traction control is a one year suspension from competition and loss of all points earned for the season.
- B. The use of electronic logic processors to control any function of the race car is prohibited.
- C. System may collect RPM, air/fuel ratio, O2 sensor, oil pressure, battery voltage and coolant temperature. May not collect GPS positioning data, speed, G-force or vehicle dynamics.
- D. ECU can only have one tune (program) installed at a time. The fuel or spark curve cannot be changed during competition.
- E. Electronic ignition system may only be used to control coil(s), trigger(s), spark curve(s), and RPM limits.

- F. VVT, VTEC, i-VCT, Etc.: may be utilized or locked out

**Engine Protest Procedure** – Protests must be made in writing immediately following the feature race and prior to the completion of the technical inspection by a licensed USAC SpeeD2 competitor who participated in that race. The protest must be specific in the alleged infraction to determine if the protest is allowed or rejected by race officials. One item per protest – per race event. A participant may only protest one car per event, and the protest must be accompanied by a \$1000 deposit. \$250 of the deposit goes to MTM to conduct the inspection and will not be refunded, regardless of the outcome. If items being protested are found legal, \$750 is awarded to the protested driver. If found illegal, \$750 will be refunded to the protester.

**516. Safety Equipment** (Track requirement may apply if more restrictive)

- A. Approved aluminum and composite seats may be used, no fiberglass. Seats must be mounted with minimum of 4 bolts 5/16 diameter. Seats must be installed and used in accordance with manufacturer's instructions. Full containment seats mandatory.
- B. It is mandatory that all cars have a headrest of high impact, shock-absorbing material meeting SFI Specification 45.2 behind the driver's head with a minimum thickness of one (1) inch.
- C. Seat belts must meet SFI 16.5 or SFI 16.1, be within manufacturer's expiration label (must have label). Seat belts must be installed and used in accordance with manufacturer's instructions.
- D. Helmets – All participating drivers must wear safety helmets designed specifically for auto racing that meet or exceeds the SA 2010, SA 2015, or 2020 Snell Foundation or SFI Foundation 31.1 Specifications and are labeled as such. Helmets will be subject to inspection at each event by the Technical Director.
- E. Uniforms – All drivers must wear fire resistant underwear, socks, shoes, gloves and a one-piece uniform fitted snugly around the neck, wrists and ankles. It is recommended that you also wear a fire resistant head sock and/or helmet skirt. Recommended all above items meet SFI Foundation Specifications 3.2A and 3.3
- F. Arm Restraints – Arm restraints are mandatory and must be worn at all times during competition.
- G. Roll Cage Nets – It is mandatory that all cars be fitted with roll cage nets on right side of the roll cage for all events, unless utilizing a full containment seat. All roll cage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism. The life of roll cage nets shall not exceed two (2) years. Caution should be used when positioning head restraining nets to be certain that the driver's head cannot get under the net in case of an accident. The bottom of the roll cage net should be as close to the top of the shoulder as possible.
- H. Roll cage nets will not be required if USAC approved full containment seats are utilized.
- I. Roll Cage Padding conforming to SFI specification 45.1 Mandatory if not utilizing full containment seat in all areas surrounding head, Highly recommended with full containment seat.
- J. All cars must be equipped with an ignition switch or emergency shut-off located within easy reach of the driver, and clearly marked on and off.
- K. A SFI approved head and neck restraint system is highly recommended.
- L. One way radio/RACEceiver mandatory when utilized by race facility. Two way communications not permitted.

**518. Appearance**

- A. USAC Midwest Thunder Midget logo must be placed on top section of sail panel right and left side. If applicable, sponsor logo(s) must be placed on right and left lower cockpit side panels to be eligible for point fund.

**Appendix One – Production-based motorcycle engines**

**All cars shall appear and fit the guidelines of a “traditional” Upright Mini Sprint/Lightning Sprint. No ‘side-winder’/micro sprints, or TQs (three quarter midgets) permitted. (Safety, Car Number and Appearance rules referenced above also apply to production-based motorcycle engine powered midgets.)**

#### **601. Chassis**

- A. Frame roll cage and halos must be constructed of a minimum of 1-3/8 inches O.D. x .095 wall thickness 4130 normalized tubing. Bottom rails must be a minimum of 1/1/4 inches O.D. by .083 wall thickness or 1-3/8 inches O.D. X .065 wall thickness.
- B. Must be chain drive.
- C. Bumpers and nerf bars must be bolted to the frame and cannot have any sharp edges or corners. Nerf bars cannot extend past the outside edge of rear tires.
- D. All cars must be rear drive only. Engine offset is a maximum of 6” measured at the rear of the engine, centerline of inside cylinders to the center line of the motor plate uprights in chassis.
- E. Radius rods may not be attached within the confines of the cockpit.
- F. No independent suspension. The car’s axles connecting the wheels must be of one-piece tubular construction.

#### **602. Body**

- A. The front part of the body, known as the nose assembly, shall not be wider than the parallel lines of the body and may not exceed the width of the frame. The nose assembly may not extend forward beyond the confines of the front bumper.
- B. The engine must be covered with a cowling or hood secured in place. The hood or cowling need not enclose the sides of the engine.
- C. Side visors on roll cage will be limited to eight (8) inches tall.
- D. Only steel or aluminum floor/belly pan are permitted.
- E. Sun visors must not extend forward more than seven (7) inches from the front of the forward most edge of the roll cage/halo tube, and may not be wider than the width of the cage; sun visors must be flat on both sides.
- F. Panels attached to nerf bars will not be permitted.
- G. All paneling must not extend past edge of frame rails more than thickness of material.
- H. One (1”) inch turnout allowed on all body and sail panel edges, except sun visor.
- I. The car must be equipped with a rear bumper at all times.
- J. Front and rear bumpers, and nerf bars must be constructed of magnetic and or stainless steel (NO TITANIUM) tubing with a minimum O.D. of 7/8 inch and having a minimum wall thickness of .065 inch and a maximum wall thickness of .120 inch. A maximum of three horizontal and/or three vertical tubes are allowed in the construction of nerf bars.
- K. All cars must have a tubular front bumper extending forward no more than 21 inches from the leading edge of the front axle. Bumpers must be constructed so as not to cause a safety hazard.
- L. Bumpers and nerf bars must be bolted to the frame and cannot have any sharp edges or corners. Nerf bars cannot extend past the outside edge of rear tires.
- M. With the exception of the exhaust system, no components or accessories may be attached to the nerf bar assembly. All mufflers must be safety wired.

- N. Airfoils, wings, spoilers or other aerodynamic appendages will not be permitted. The Technical Director may have any panel or part removed which in their opinion is not within the spirit or intent of this rule.

### 603. Dimensions and Weight

- A. The wheelbase must be at least 65 inches and no more than 74 inches. (Measured centerline to centerline)
- B. All cars must weigh a minimum of 950 lbs. post-race including driver
- C. Deleted
- D. Additional bolt on weight must be mounted and fastened to the frame and/or chassis in a secure manner. Weight must be mounted in an area between bottom frame rails, to the main frame, between front and rear axles and no higher than mid rails at cockpit. All weight must be mounted within confines of frame. NO BALLAST/WEIGHT IN NERFS, BUMPERS, FRONT AXLE. Highly encourage use of AllStar Ballast Bracket (Product Code #14194 – various tubing sizes) or similar product.

### 604. Fuel and Fuel System

- A. Methanol only. No additives or oxygenated fuels will be permitted. All fuel is subject to testing at any time. Any fuel that does not conform to these standards, as administered at the track, will be considered illegal. The use of illegal fuel could result in disqualification from the event and/or the entire program.
- B. All tanks must have a minimum of four mounts to the chassis.
- C. Fuel tanks may not be mounted to the chassis utilizing any portion of the access plates or the nut plates bonded into the fuel bladder.
- D. The engine must be equipped with a fuel shut-off device.
- E. Fuel tank meeting SFI specification 28.1 or a conventional midget style tail tank and bladder meeting SFI specification 28.2 is required. A conventional midget-style tail tank and bladder will be required in 2025. Metal tanks are not permitted. Rollover valves will be mandatory. All tanks/fuel cells must be securely mounted between frame rails and behind the driver.

### 605. Engine Specifications

- A. Any 1000cc, normally aspirated, production motorcycle engine may be used. Engine model must be in production for two full calendar years prior to use. No current year production engines allowed. No limited production engines will be permitted. Serial number must be identifiable.

**(USAC Speed2 Midwest Thunder Midget Series will utilize a compression gauge and bore/Stroke tool to detect modifications to combustion chambers which fall outside of the range exhibited by similar engines to determine compliance with all rules listed above.)**

- B. Engine case, cylinders, head, crank, rods, pistons, cams, valves, transmission, coatings, and clutch must remain stock OEM and operational.
- C. Cylinder head may be milled for cleanup. Deck height must remain within .010" of OEM specification
- D. Degreeing of stock OEM cams is permitted.
- E. All cars must be able to start the first race under their own power without assist.
- F. Deleted

- G. Oiling system may be modified for reliability. Oil pan, pickup, cooler, lines, tank(s), and pump(s) may be modified or replaced.
- H. Electronic or Mechanical Injection may be used. No weight penalty exists for either injection system. Carburetors are also permitted.
- I. The motor plate may not be made from carbon fiber, or any type composite materials.

#### **606. Electronics**

- A. Aftermarket Engine Control Module(s) or Fuel Management System(s) will be permitted may collect RPM, air/fuel ratio, O2 sensor, oil pressure, battery voltage and coolant temperature. May not collect GPS positioning data, speed, G-force or vehicle dynamics.. Electronics that provide traction control are prohibited. No aftermarket plug-in traction control devices, wheel speed, or chain sensors will be permitted. All electronic components may be inspected, sealed or confiscated by USAC or organizer at any time. The maximum penalty for utilizing traction control is a one year suspension from competition and loss of all points earned for the season.
- B. All cars must be equipped with ignition switch or emergency shut-off located within easy reach of the driver.
- C. Tachometer limited to use in recording RPM data only
- D. ECU can only have one tune (program) installed at a time. The fuel or spark curve cannot be changed during competition.

#### **607. Exhaust**

- A. Exhaust system tail pipe(s) must not be any wider than nerf bar. Must be securely mounted with back-up system such as safety wire
- B. The car may be required to have a muffler if local conditions warrant. If so, this will be stated on each individual entry blank. The technical director may disallow a muffler that in their opinion is not within the spirit or intent of this rule.

#### **608. Suspension Components**

- A. No electronic or mechanical weight, sway bar or any suspension item adjuster allowed. (No torsion bar/coil over spring adjusters, Jacob ladder/Panhard bar adjusters, or 'shadow jackers' permitted.)
- B. All front axles must be constructed of 4130 tubing. Titanium front or rear axles are not permitted.
- C. Adjustable shocks are permitted.
- D. Cars are limited to four (4) shocks/dampeners.

#### **609. Wheels**

- A. The number of allowable wheels is restricted to two (2) front wheels and two (2) rear wheels on each car.
- B. The wheel diameter must be 13 inches.
- C. The wheel width is limited to eight (8") inches for both front wheels.
- D. The rear wheels are a maximum in width of eight (8) inches for the left rear, and ten (10") inches for the right rear.
- E. An approved tire bead locking device must be used on the outer bead seat of the right rear tire and wheel assembly.
- F. All bolts are mandatory in bead lock and wheel centers.

## 610. Tires

- A. All Tires must be Hoosier.
- B. Any device(s) used for warming the tires prior to competition is prohibited.
- C. Any solvents or a chemical applied to the tire that alter the chemical makeup of the compound or have the effect of altering tire durometer is prohibited.
- D. Sipping and/or grooving is permitted.
- E. Tires (LF- D12, D15) (RF-D12, D15, D20) (LR-D12, RD12, D20) (RR-SP2, SP3) – . (We are providing a burn-offer period until the 7/10/2026 Bloomington race for the SP-2s to allow drivers to use the tires remaining in their possession.)
- F. Electronically controlled tire pressure bleeders will not be allowed.

## 611. Brakes

- A. No electronic controlled brake bias adjuster. (Manual adjustment only)
- B. If at any time during competition it becomes evident that a car is without brakes, the necessary repairs must be completed before the car can continue in competition.

**612 Safety Equipment** – All requires listed in Section 516 under automotive engine midget rules apply for motorcycle powered midgets. (Track requirement may apply if more restrictive)

## Appendix Two – Appeals Process

Any participant in a USAC Speed2 Midwest Thunder Midget Series sanctioned race meeting waives any rights such participant may have to be a party or to take any action in court seeking legal or equitable relief against any decision or action of any kind by USAC or any race officials. A participant's exclusive right to contest a decision or the rules or regulations of USAC Speed2 Midwest Thunder Midget Series is within the protest and appeal procedure of USAC Speed2 Midwest Thunder Midget Series, and any decision reached within this procedure is final.

- 1) Initiation of an Appeal – Any participant failing a technical inspection is entitled to appeal and must submit a written Notice of Appeal, but any such action shall not be stayed because appeal is taken.
- 2) Content of the Appeal – The Notice of Appeal must contain reference to the specific action by the USAC Speed2 Midwest Thunder Midget Series from which an appeal is taken, the date of the occurrence, the reasons why the participant is appealing, and specific reference to any Rules and/or Bylaws allegedly violated and the relief requested. The Notice of Appeal must be accompanied by copies of all written documents pertaining to the appeal, such as protests, responses, rulings, announcements, etc. The original Notice of Appeal must be submitted to a Race Director of the USAC Speed2 Midwest Thunder Midget Series by 5 p.m. EST of the third business day following the release of the cited decision.
- 3) Any appeal shall be submitted by the Race Director to a Court of Appeals for adjudication. The Court of Appeals shall be made up of members of the USAC Speed2 Midwest Thunder Midget Series Race Director team, Race Directors of other USAC Speed2 organizations across the country, and/or members of the USAC Corporate office. The Court of Appeals shall convene a hearing within thirty (30) days of receipt of the appeal unless mutually extended.

## Appendix Three – USAC Policies covering all Competitors

All competitors in a USAC Speed2 Midwest Thunder Midget Series sanctioned race meeting are subject to the USAC Social Media Policy; Substance Abuse Policy; Publicity Usage Policy; and the Waiver of Liability, Assumption of Risk and Indemnity Agreement Policy. Any competitor found guilty of unsportsmanlike conduct (including reckless and overly aggressive driving endangering the safety of

participants, officials, track workers, fans or individuals in pits) or failure to adhere to the policies referenced above can result in disciplinary action up to and including suspension of the Competitor and the Affiliated Driver. Competitors are defined as Drivers, Owners, Crew members, Sponsors, Family Members of Competitor, and any other party affiliated with a Competitor.